**Key Concepts Submittal Form**

**Engineering Process: (Read through the slides and take notes on the following topics)**

1. **Iterative:**
2. **Design Brief:**
3. **Brainstorm:**
4. **Select Best Solution:**
5. **Build & Program a Solution:**
6. **Test & Analyze:**
7. **Review & Revise:**
8. **Communicate:**

**Robot Logic: (Read through the slides and take notes on the following topics)**

1. **Robot Logic:**
2. **Wait:**
3. **Loop:**
4. **Switches (If –Then):**
5. **Switches (Or):**
6. **Switches (And):**

**Robot Logic: (Read through the slides and take notes on the following topics)**

1. **Color Sensor:**
   1. How is the Color Sensor like an eye?
   2. How is it not like an eye?
   3. Which animals have many more eyes than we have? How does that change what they see?
   4. Do plants grow toward light?
2. **Gyro Sensor:**
   1. How is the Gyro Sensor like our inner ear?

* 1. What is a vestibular system?
  2. What is proprioception?
  3. What is the strangest example of proprioception you can find?

1. **Touch Sensor:**
   1. How is the Touch Sensor like skin?
   2. How is it not like skin?
   3. Why is it important to have a sense of touch?
   4. How do animal’s sense touch if they don’t have skin?
2. **Rotation Sensor:**
   1. How is the Rotation Sensor like our inner ear?
   2. How is it different from the Gyro Sensor?
   3. How do our muscles and inner ear work together?
   4. Describe a way that you might use your muscles and vestibular system in a behavior (or describe an animal using its muscles and vestibular system).
3. **Ultrasonic Sensor:**
   1. How is the Ultrasonic Sensor like an ear?
   2. How is it like an eye?
   3. Describe an animal that hears or sees things we cannot.

* 1. Why is that behavior important for that animal?

**Systems: (Read through the slides and take notes on the following topics)**

1. **Open Loop System:**
2. **Closed Loop System:**
3. **Feedback:**
4. **Input:**
5. **Output:**
6. **Subsystem:**